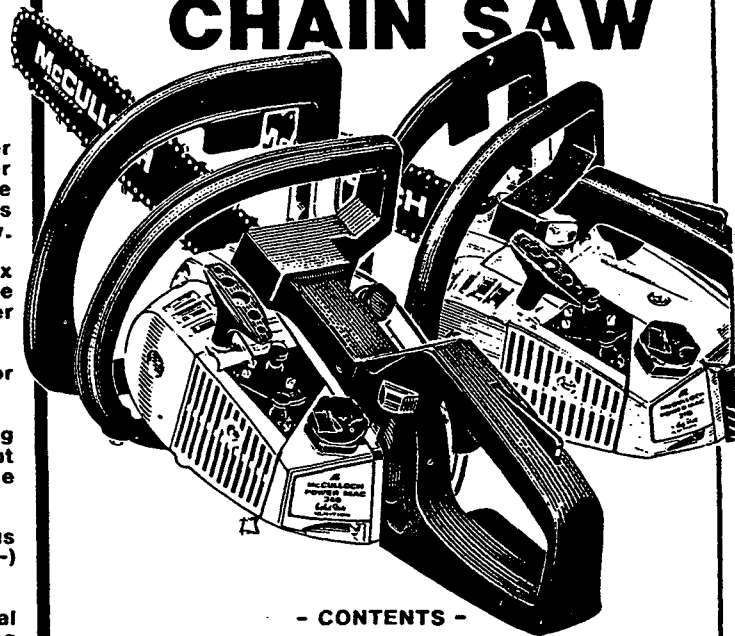


ILLUSTRATED PARTS LIST

PM 310		PM 320		PM 330	
MODELS	SERIAL NUMBER PREFIX	MODELS	SERIAL NUMBER PREFIX	MODELS	SERIAL NUMBER PREFIX
600042A	16-	600021C	16-	600043E	16-
600042C	16-	600021E	16-	600043G	16-
600042D	16-	600021G	16-	600043J	16-
600042E	16-	600021I	16-	600043P	16-
600042F	16-	600021J	16-		
600042G	16-	600021K	16-		
600042H	16-	600021P	16-		
600042J	16-				
600042K	16-				

POWER MAC™ 310, 320, 330 CHAIN SAW



McCulloch chain saws are identified by a model number (in this instance, 600042) followed by a suffix letter (A, B, C, etc.) stamped on the identification plate attached to the saw. Suffix letters denote variations in parts or assemblies in the manufacture of the saw.

Part numbers listed in this I.P.L. which have a suffix letter or letters following the description, indicate the part is used only on the model(s) identified by the letter or letters.

Part numbers and descriptions without suffix letter or letters apply to all versions of the chain saw model.

Part numbers which have one or more dots (.) preceding their descriptions may be ordered individually, but they are also included in the kit or assembly whose description begins directly above the dot(s).

Part numbers in this IPL which were not in the previous IPL covering these saws, are indicated by a dash (-) preceding the new part number.

The policy of McCulloch Corporation is one of continual improvement in design, manufacturing and engineering advancement wherever possible to assure still finer two-cycle power tools. Hence, specifications, equipment, colors, design and manufacturer's suggested list prices are subject to change without notice and McCulloch Corporation reserves the right to make such changes without prior notification or obligation to backfit or supply backfit components for units previously shipped from the factory.

- CONTENTS -

	Page
Figure 1. General	2
Figure 2. CHAIN BRAKE Assembly	4
Figure 3. Carburetor Assembly	5
Figure 4. Powerhead Assembly	6
Figure 5. Handle Assemblies	8
Service Specifications	9
Bar & Chain Combinations	9
Tools and Accessories	9

September 1984



McCULLOCH
CORPORATION

216186-R1-E

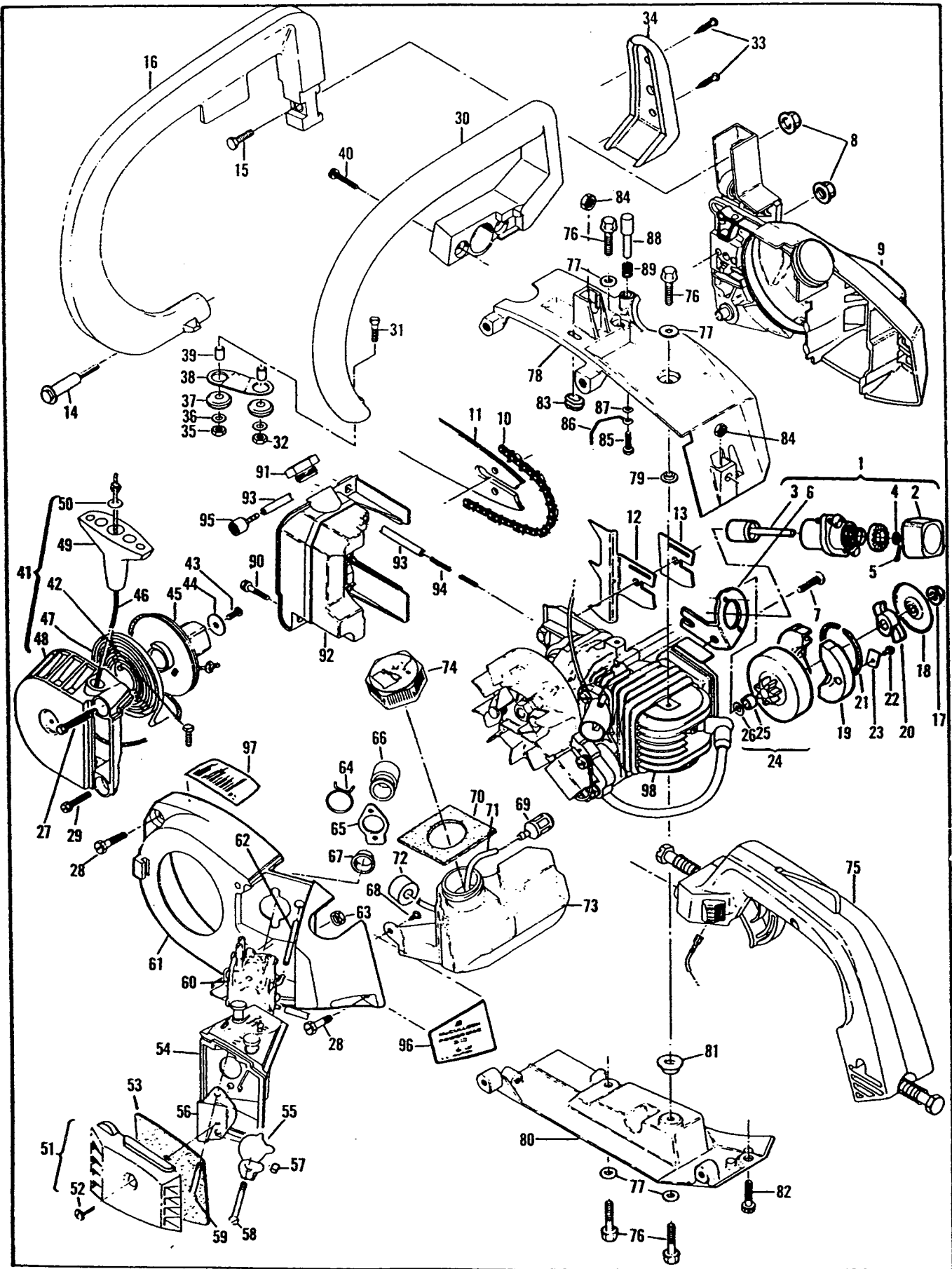


Figure 1. General

Figure 1. General

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.	ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	215662	① Kit - Grinder Asy-AUTO-SHARP	1	48	216485	. Housing Assembly - Starter	1
2	215447	① . Knob	1	49	91255	. Kit - Starter Handle	1
3	216707	① . Wheel Asy - Grinding	1	50	105490	. . Washer - Starter Handle	1
4	216134	① . . Washer	1	51	215481	Cover Assembly - Air Filter	1
5	216133	① . . Pin - Cotter	1	52	213118	. Screw - Air Filter Cover	1
6	215208	① . Bracket - AUTO-SHARP	1	53	215456	Filter - Air	1
7	120025	① Screw - Pan hd M5 x 10	2	54	215482	Air Box Assembly	1
8	120029	Nut - Hx Flg M6 x 1.0	2	55	213411	Plate - Choke	1
9	- -	CHAIN BRAKE Asy (Figure 2)	1	56	215455	Bracket - Choke	1
10	- -	Chain (see page 9)	1	57	213420	Spacer	1
11	- -	Bar (see page 9)	1	58	213105	Screw - Pan hd M5 x 55	1
12	214207	② Spike	1	59	213104	Screw - Special M5 x 50	1
13	93148	③ Spacer - Bar Pad	1	60	- -	Carburetor Asy (Figure 3)	1
14	215695	Screw - Hx hd M5 x 50 ST(SEMS)	1	61	215563	Kit - Fan Housing/Grommet	1
15	120028	Screw - Hx hd M6 x 20	1	62	213542	. Hose - Pulse	1
16	93021A	Lever - Wraparound	1	63	94501	. Nut - Hx M5 x 0.8 Thin	1
17	94244	Nut - Clutch	1	64	94302	Clip - Spring	1
18	94243	Plate - Dust	1	65	92747	Flange - Carburetor Mounting	1
19	213278	Clutch Assembly	1	66	213211	Kit - Carburetor Boot	1
20	94242	. Rotor	1	67	95656	. Eyelet	1
21	93608	. Spring Asy - Clutch	1	68	111002	Screw - Pan hd 10-16 x 1/2	1
22	110957	. Rivet - Fl 1/8 x .547	2	69	93720	Pickup - Fuel	1
23	85064	. Plate - Clutch Shoe	2	70	94491	Seal - Fuel Vent	1
24	95646	Drum/Spkt/Bearing Asy	1	71	93997	Hose - Fuel	1
25	91222	. Bearing	1	72	90869	Filter - Vent	1
26	215259	. Washer - Sprocket	1	73	216666	Kit - Fuel Tank	1
			1	74	216098	. Cap Assembly - Fuel	1
			1	75	- -	Handle Assemblies (Figure 5)	1
27	120096	Screw - WH M5 x 55 ST	1	76	213172	Screw - Hx Wsh M6 x 17	4
28	120095	Screw - WH M5 x 20 ST	2	77	213021	Washer - Ramp Conical	4
29	120098	Screw - WH M5 x 18	1	78	214152	Kit - Top Shroud	1
30	216816	Kit - Frame	1	79	214350	. Insulator	1
31	216064	. Screw - M5 T-Head	1	80	214154	Kit - Bottom Shroud	1
32	216585	. Nut - Hx M5 Lock	1	81	214350	. Insulator	1
			1	82	120095	Screw - WH M5 x 20 ST	1
31	216064	③ . Screw - M5 T-Head	1	83	94192	Grommet	1
32	216585	③ . Nut - Hx M5 Lock	1	84	120034	Nut - Hx M6 x 1.0	2
33	111011	③ . Screw - PM 10-16 x 7/8	2	85	110999	Screw - Hx hd 6-20 x 5/8 WH	1
34	95141	③ . Weight - Frame	1	86	94540	Rod - Oiler	1
35	216585	Nut - Hx M5 Lock	1	87	100001	Washer - Plain	1
36	120045	Washer - M5	2	88	216860	Knob - Oiler	1
37	110989	Grommet	2	89	93634A	Spring - Compression	1
38	93152	Link	1	90	120095	Screw - WH M5 x 20 ST	2
39	93057	Spacer - Mount	2	91	216095	Cap - Oil	1
40	120036	Screw - Pan hd M4 x 25(SEMS)	2	92	216696	Tank Assembly - Oil	1
41	216491	Kit - Starter Assembly	1	93	94405	. Hose - Oil Pickup	1
42	216064	. Screw - M5 T-Head	1	94	93998	. Spring - Oil Hose	1
43	110041	. Screw - Pan hd 8-32 x 1/2	1	95	92465	. Pickup - Oil	1
44	68497	. Washer	1	96	93856	Plate - Name (PM 310)	1
45	213261	. Kit - Starter Drum	1	96	93854	Plate - Name (PM 320)	1
46	83203	. . Rope - Starter	1	96	93858	Plate - Name (PM 330)	1
47	83078	. Spring - Starter Rewind	1	97	95206	Plate - Instruction	1
				98	- -	Powerhead Assembly(Figure 4)	1

① Used on PM 320 models.

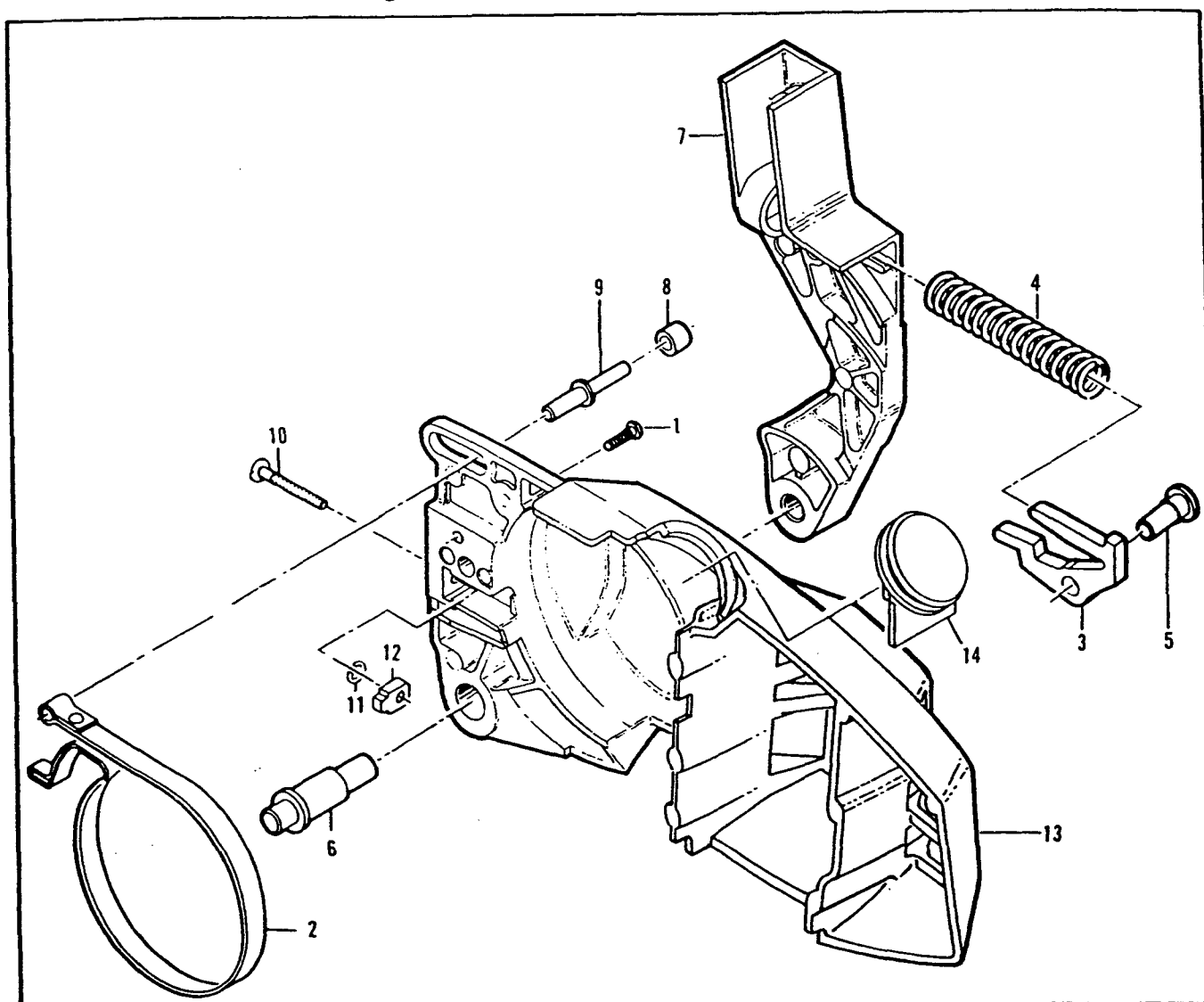
② Used on PM 310 models with suffix letters A, C, E, J; on PM 320 models with suffix letters C, E, G, I, J, K, P; and on PM 330 models with suffix letters E, G, J and P.

③ Used as optional equipment on PM 310, 320 and 330 models not equipped with Spike, P/N 214207.

④ Used on PM 310 and 330 models with suffix letter J.

⑤ Used on PM 330 models with suffix letter J.

Figure 2. CHAIN BRAKE Assembly.



ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
	216409	①CHAIN BRAKE Assembly 214527	1
	216552	②CHAIN BRAKE Assembly 218370	1
1	111047	. Screw - Fil hd 8-32 x 5/8	1
2	94709	. Band - Brake	1
3	215758	. Kit - Latch	1
4	- -	. Spring - Compression	1
5	93602	. Pivot - Latch	1
6	216549	. Pivot - Lever	1
7	93159	. Lever - Actuating	1

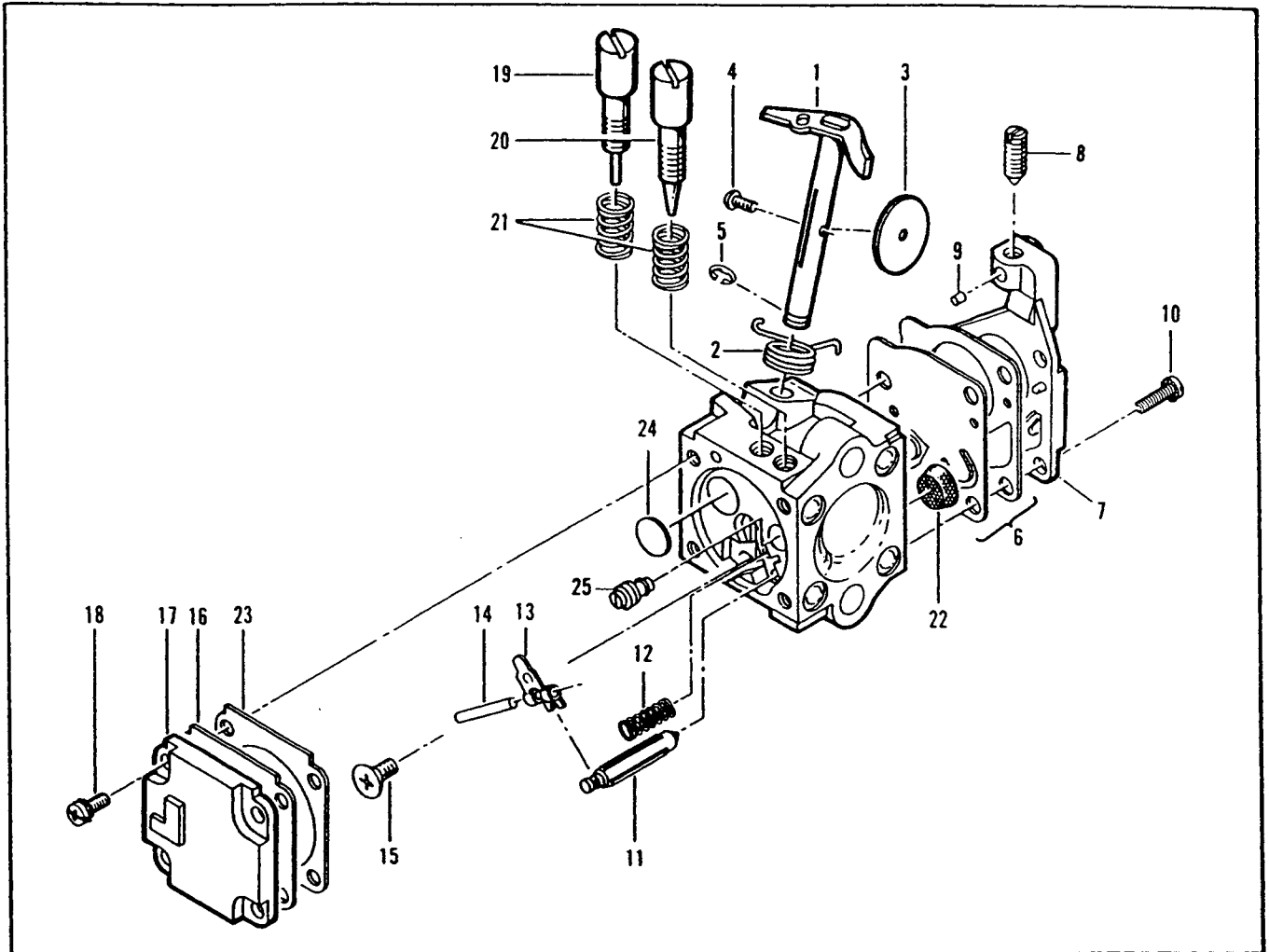
ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
8	214368	. Bearing - Roller	1
9	213907	. Pin - Roller	1
10	90658	. Screw - Adjusting	1
11	110907	. Ring - Retaining	1
12	84929	. Nut - Bar Adjusting	1
13	216411	①. Housing - Brake	1
13	216554	②. Housing - Brake	1
14*	93528A	Cover - AUTO-SHARP	1

* Used on PM 310 and PM 330 models.

① Used on PM 310 models with suffix letters D, F, G, H, K; PM 320 models with suffix letters G, I, K; and PM 330 models with suffix letter G.

② Used on PM 310 models with suffix letters A, C, E, J; PM 320 models with suffix letters C, E, J, P; and PM 330 models with suffix letters E, J and P.

Figure 3. Carburetor Assembly.



ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
	94496	Carburetor Assembly (Zama)	1
1	--	. Shaft Asy - Throttle	1
2	--	. Spring - Throttle Return	1
3	--	. Plate - Throttle	1
4	--	. Screw - Plate (M3)*	1
5	--	. "E" Ring	1
6	--	①②. Kit - diaphragm & Gaskets	1
7	--	. Cover Asy - Pump	1
8	--	. Screw - Idle Speed	1
9	--	. Insert - Friction	1
10	--	. Screw - Pump Cover (M4)*	4
11	--	①. Needle - Inlet	1
12	--	①. Spring - Lever	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
13	--	①. Lever - Inlet Needle	1
14	--	①. Pin - Lever	1
15	--	①. Screw - Lever Pin (M3)*	1
16	--	②①. Diaphragm Asy - Metering	1
17	--	. Cover - Diaphragm	1
18	--	. Screw - Diaphragm Cover(M3)*	4
19	--	③. Screw - Idle Adjust	1
20	--	③. Screw - Main Adjust	1
21	--	③. Spring - Needle	2
22	--	①. Screen - Filter	1
23	--	①. Gasket - Metering Diaphragm	1
24	--	①. Welch Plug	1
25	--	①. Orifice - Main Fuel	1

* The "M" denotes metric screw size.

① Contained in Repair Kit, P/N 217081.

② Contained in Gasket/Diaphragm Kit, P/N 217089.

③ Contained in Needle Kit, P/N 216804.

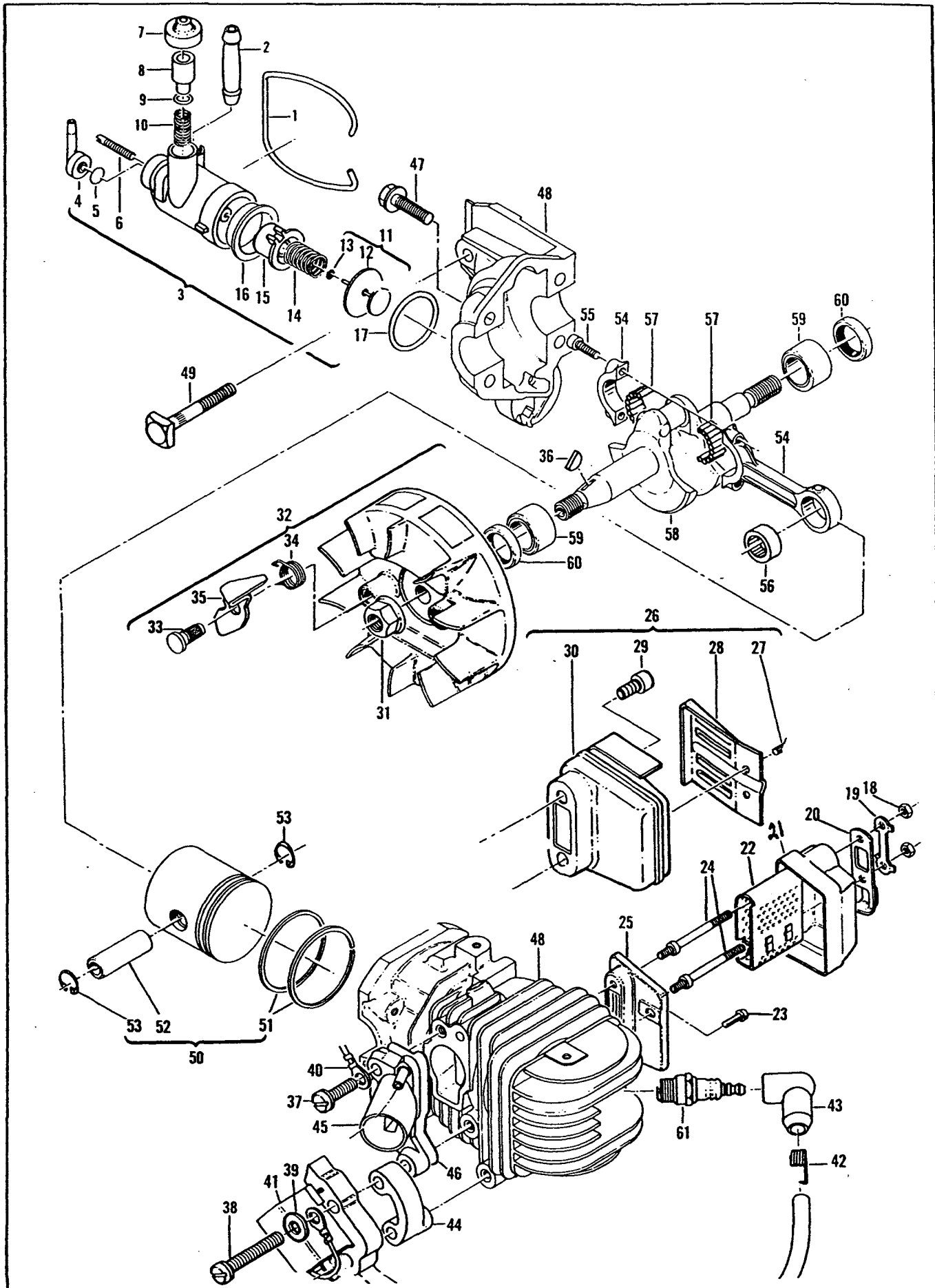


Figure 4. Powerhead Assembly.

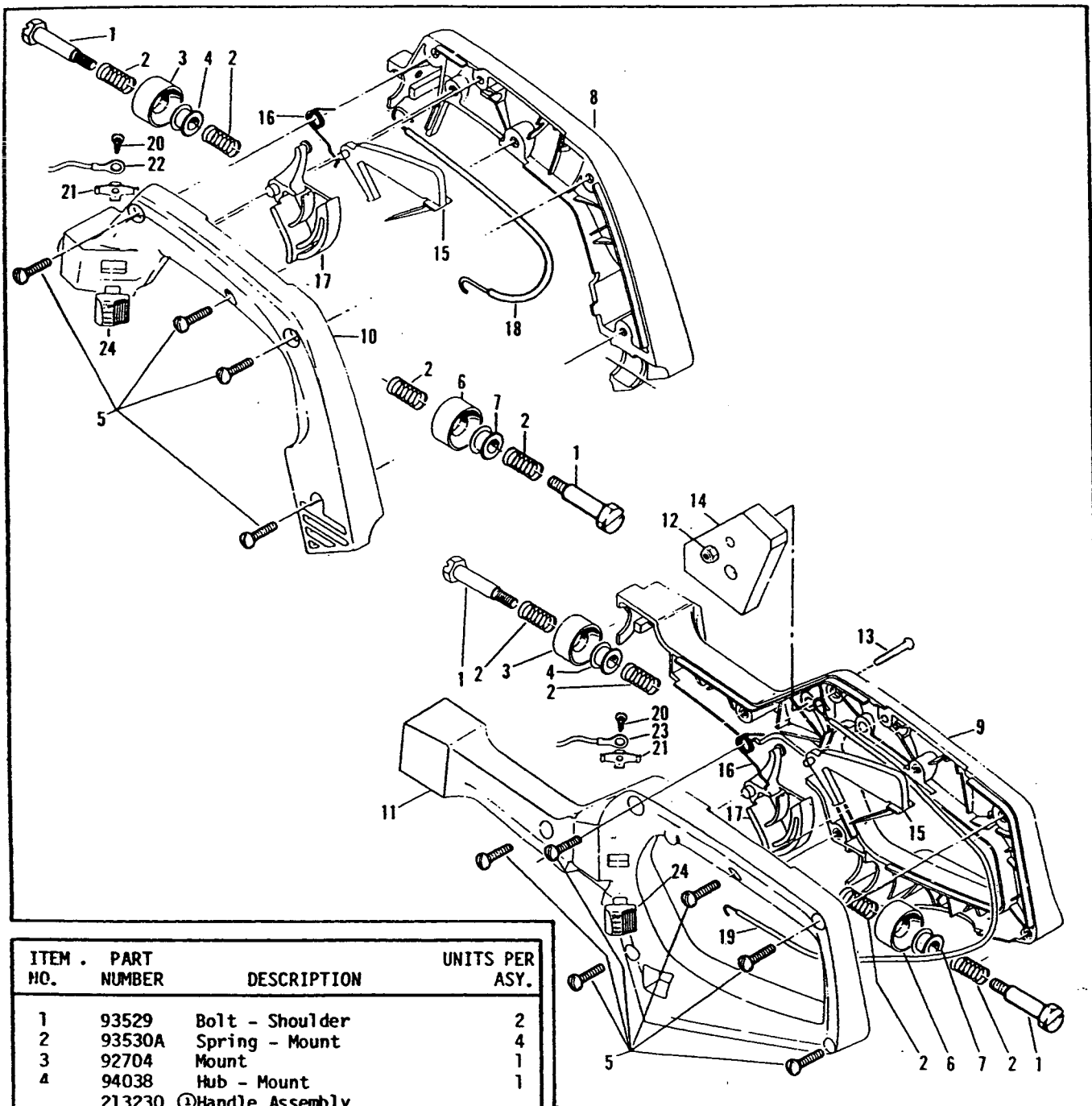
Figure 4. Powerhead Assembly

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.	ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	93150	Bail	1	33	68796	. Pin - Starter Pawl	2
2	217168	Connector - Outlet	1	34	67814	. Spring - Pawl	2
3	216424	Pump Assembly - Chain Oiler	1	35	94493	. Pawl - Starter	2
4	215196	. Connector - hose	1	36	102164	Key - Woodruff	1
5	94115	. Valve - Oiler	1	37	120027	Screw - Pan hd M5 x 18 (SEMS)	1
6	216838	. Screw - 6-40 x .800	1	38	120112	Screw - Skt hd M5 x 40	2
7	215151	. Cap - Oil Pump	1	39	24236	Washer - Special	1
8	93301	. Plunger - Oil Pump	1	40	93514A	Wire Assembly - Ground	1
9	105614	. "O" Ring - .239 x .070	1	41	216599	Electronic Ignition Assembly	1
10	93632	. Spring	1	42	102556	. Connector - Spark Plug	1
11	216426	① . Piston Assembly - Oiler	1	43	95266	. Boot - Spark Plug	1
12	--	① . Ring - Oil Pump Piston	1	44	214356	Spacer - Coil	1
13	--	① . "O" Ring - .114 x .070	1	45	215601	Manifold - Carburetor	1
14	83891	. Spring - Return	1	46	92778	Gasket - Insulator	1
15	--	① . Sleeve - Oil Pump	1	47	120097	Screw - Hx hd W/H M5 x 25	4
16	--	① . Eyelet	1	48	215943	Kit - Cylinder/Crankcase	1
17	110653	"O" Ring	1	49	92777	. Bolt - Bar Mounting	1
18	215871	② Nut - Muffler	2	50	94660	Piston Assembly	1
19	215471	② Plate - Lock	1	51	94136	. Ring Set	1
20	215472	② Deflector - Exhaust	1	52	92836	. Pin - Piston	1
21	215774	② Cover	1	53	111026	. Ring - Snap	2
22	215776	② Baffle	1	54	94135	Connecting Rod Assembly	1
23	213369	② Screw - Hx Wsh M6	1	55	94654	. Screw - Connecting Rod	2
24	215757	② Bolt - Shoulder	2	56	110984	. Bearing - Needle	1
25	215773	② Base	1	57	68095	. Roller - Needle (Set of 20)	1
26	215411	③ Muffler/Deflector Assembly	1	58	92750	Crankshaft	1
27	110681	③ . Screw - Skt hd 10-24 x 1/4	2	59	213282	Bearing - Crankshaft	2
28	92961	③ . Deflector - Exhaust	1	60	83859	Seal - Crankshaft Oil	2
29	215394	③ . Screw - Special M6	2	61	235593	④ Spark Plug	1
30	215411	③ . Body - Cover	1				
31*	213169	Nut - Hx Flg M8 x 1.25	1				
32	94737	Flywheel/Pawl Assembly	1				

* Flywheel nut torque should be 190 to 200 pound x inches (21.5 to 22.6 N.m.).

- ① Contained in Oil Pump Repair Kit, P/N 216426.
- ② Used on PM 310 models with suffix letters A, C, E, J; PM 320 models with suffix letters C, E, J, P; and PM 330 models with suffix letters E, J and P.
- ③ Used on PM 310 models with suffix letters D, F, G, H, K; PM 320 models with suffix letters G, I, K; and on PM 330 models with suffix letter G.
- ④ Used on PM 310 and 320 models with suffix letters C, E, G; on PM 330 models with suffix letters E and G.
- ⑤ Used on PM 310 models with suffix letters D, A, F, H, J, K; PM 320 models with suffix letters I, J, K, P; and PM 330 models with suffix letters J and P.

Figure 5. Handle Assemblies.



ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	93529	Bolt - Shoulder	2
2	93530A	Spring - Mount	4
3	92704	Mount	1
4	94038	Hub - Mount	1
	213230	① Handle Assembly	
	213231	② Handle Assembly	
	213235	③ Handle Assembly	
5	111032	. Screw - PH hd 10-16 x 5/8	A/R*
6	92704	. Mount	1
7	94038	. Hub - Mount	1
8	213229	① Handle - Right Half	1
9	213224②③	Handle - Long Right	1
10	213228	① Handle - Left Half	1
11	213226②③	Handle - Long Left	1
12	101326	③ Nut - Hx Lock 10-24	1
13	104400	③ Screw - Pan hd 10-24 x 1-1/4	1
14	95042	③ Weight - Handle	1
15	93310	. Trigger - Safety	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
16	93515	. Spring - Trigger	1
17	213232	. Trigger - Throttle	1
18	213234	① Wire Asy - Throttle	1
19	213233	② Wire Assembly - Throttle	1
20	110706	. Screw - Pan hd 8-18 x 1/2	1
21	62451	. Contact - Ignition Switch	1
22	93505A	. Wire-Stop Switch(PM 310/320)	1
23	94039	. Wire-Stop Switch(PM 330/340)	1
24	68846	. Button - Stop Switch	1

① Used on PM 310 and PM 320 models.
 ② Used on PM 330 models.
 ③ Used on PM 330 models with suffix letter J.

* Four used on Handle Assembly, P/N 213230.
 Six used on Handle Assemblies, P/N 213231 and P/N 213235.

Bar & Chain Combinations

PART NUMBER	DESCRIPTION	CHAIN SAW MODEL		
		PM 310	PM 320	PM 330
214919N	Chain - MP 370GL	A, C, E, F, K		
214235	Bar - 14" Mini Pro	A, C, E, F, K	C, E, J, P	
214656N	Chain - AS 370GL		C, E, J, P	
214230N	Chain - AS 370G		I, K	
214236	Bar - 16" Mini Pro	D, H	I, K	E, P, G
214925N	Chain - MP 370GL	D, H		E, P, G
92625N	Chain - SM 250GL	J		J
91663	Bar - 14" Mini Pro	J		J

Tools & Accessories

PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION
214207	Spike	214212	Kit - Tool
214220	Scrench	95169	① Kit - Spark Arrester Screen
93797	Wrench - Screwdriver	216805	② Kit - Spark Arrester Screen
214194	Lubri-Gun	94416	Adaptor - Intake (Cyl.)
91226	Holder - Flywheel	94415	Adaptor - Intake (Air Box)
93095	Bracket - AUTO-SHARP	68917	Adaptor - Exhaust
216707	Kit-Grinding Wheel-AUTO-SHARP	85229	Kit - Fuel Tank Plug
94365	Kit-Carrying Case, 14"(PM 310/320)	215432	Tool - Pressure Test
92977	. Scabbard, 14"	63094	Driver - Wrist Pin
94364	Kit-Carrying Case, 16"(PM 310/320)	501334	Tester - Ignition
214202	. Scabbard, 16"	67537	Loctite
110706	Tool-Handle/Throttle Trigger Screw	69794	Locquic
		110083	R.T.V. Sealant

- ① Contains round spark arrester screen, used on PM 310 models with suffix letters D, F, G, H, K; on PM 320 models with suffix letters G, I, K; and on PM 330 models with suffix letter G
- ② Contains square spark arrester Screen, used on PM 310 models with suffix letters A, C, E, J; on PM 320 models with suffix letters C, E, J, P; and on PM 330 models with suffix letters E, J and P.

Service Specifications

Displacement	35 cc (2.1 cu. in.)	Fuel Type	Regular Grade Leaded
Bore and Stroke	38 mm x 30.5 mm (1.5 in. x 1.201 in.)	Fuel/Oil Mixture . . .	40:1 w/McCulloch Oil
Bearings	Main: Needle	Filtering System, Fuel	Enclosed Felt Fuel Filter
Intake System	3rd Port	Filtering System, Air	Felt Air Filter
Fuel Tank Capacity . . .	330 cc (11.2 oz.)	Lamination Gap . . .	0.3 to 0.4 mm (.011 to .015 in.)
Chain Oiler Capacity . .	100 cc (3.4 oz.)	Timing	26° B.T.D.C.
Clutch Engaging Speed .	3800 R.P.M.	Piston Rings	2 Cast Iron Compression
Idle Speed	2700 to 2900 R.P.M.	Weight: PM 310	4.49 kg (9.9 lbs.)
Ignition	Electronic	PM 320	4.54 kg (10 lbs.)
Carburetor	Diaphragm Type, 2-needle Adjustable	PM 330	4.71 kg (10.4 lbs.)